# **BookletChart**

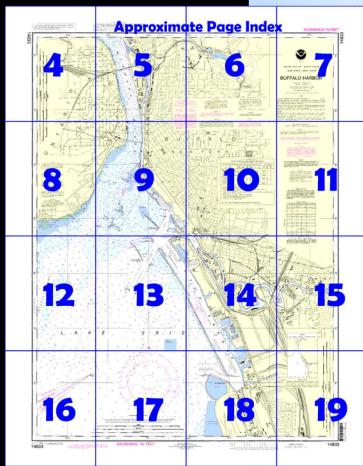
# **Buffalo Harbor**

(NOAA Chart 14833)

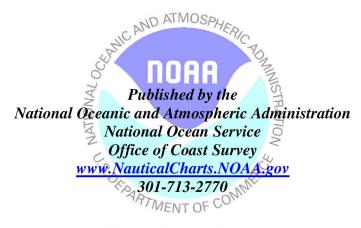


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.







## **What are Nautical Charts?**

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

## What is a BookletChart<sup>™</sup>?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

## **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 6 excerpts] (56) Black Rock Lock connects the canal with the river near the foot of Squaw Island. The lock has a usable length of 625 feet with a clear width of 68 feet and a depth of 21 feet

a clear width of 68 feet and a depth of 21 fee over the sills. The lock has an average lift of 5.2 feet.

(69) Several small-craft facilities are on **Scajaquada Creek**, which enters the canal about 0.5 mile SE of the lock. Transient berths, gasoline, water, electricity, marine supplies, a launching ramp, a 4-ton mobile

crane, and hull and gasoline engine repairs are available. In 1977, 4 feet was reported available in the approach and alongside the berths.

(71) **Peace Bridge** crosses the open Niagara River about 1.5 miles from the head. The bridge has several fixed spans with center clearances of 56 to 91 feet. The normal vessel route is under the fourth span from the U.S. mainland (the first being the bowstring truss over the Black Rock Canal).

This span has a clearance of 67 feet at the center. An intake crib marked by a light is just downstream of the third span from the U.S. mainland. Navigation through this span is difficult in the turbulent current.

(73) **International Bridge** crosses the river about 1.5 miles below Peace Bridge. This railroad bridge has fixed spans with clearances of 22 feet. A swing span at the E end of the bridge, close W of Squaw Island, does not open for the passage of vessels. (See **33 CFR 117.803**, chapter 2, for drawbridge regulations.) (74) Just below International Bridge on each side of the river are submerged flowmeter pilings about 13 feet below the water surface.

(75) Fort Erie, Ont., is a community on the W side of the head of the Niagara River.

(76) Lower Black Rock Harbor is the name applied to the part of Buffalo which fronts on the Niagara River below Black Rock Lock. The harbor is about 0.75 mile long with the upper part between the lock and the mainland. Loaded vessels should use the Black Rock Canal to approach the harbor. Approaching from the open river, the current passing the guide pier below the Black Rock Lock creates a powerful eddy with water flowing upstream along the U.S. side for more than 0.5 mile below the lock. Caution is advised when entering the harbor or docking. The harbor has several marinas. Transient berths, gasoline, diesel fuel, water, ice, electricity, marine supplies, a launching ramp, mobile lifts to 30 tons, and hull, engine, and electronic repairs are available. In 1977, depths of 7 to 12 feet were reported alongside the berths.

(121) **Buffalo Harbor** is at the E end of Lake Erie, where the lake converges to an open and comparatively shallow bay about 8 miles across N and S and is subject to great storms from the SW. The lake discharges into the Niagara River at the NE corner of this bay. The city of **Buffalo**, **N.Y.**, is along the E lakeshore and the E bank of the head of the Niagara River. **Buffalo River** meanders through the city from E to W and enters the lake near the head of the Niagara River.

(124) **Buffalo Harbor Light** (42°52.2'N., 78°54.2'W.), 71 feet above the water, is shown from a white tower on a concrete base on the S end of the detached W breakwater on the N side of Buffalo Harbor North Entrance Channel. A fog signal is at the light.

(126) **Buffalo Outer Harbor** has entrances at the N and S ends. From deep water in Lake Erie, **Buffalo Harbor North Entrance Channel**, marked by lights on the ends of the breakwaters and lighted buoys, extends NE into Outer Harbor and thence into two waterways, Black Rock Canal and Buffalo River. Federal project depth in the channel is 25 feet. There is a strong N current across this channel; navigators should guard against this by holding up toward the S. **Buffalo Harbor South Entrance Channel**, marked by lights on the ends of the breakwaters, extends SE from deep water in the lake to Outer Harbor and thence into two canals, Union Canal and Lackawanna Canal. Federal project depth in the channel is 30-29 feet. (See Notice to Mariners and latest edition of charts for controlling depths.)

(128) **Lackawanna Canal** Canalextends S for 0.75 mile from the S end of Outer Harbor. The entrance is marked by private lights. In 1973, the controlling depth was 25 feet with 24 feet along the dock on the W side and shoaling to 22 feet at the S end.

(129) **Union Canal** marked at the entrance by a buoy and a private light, extends E for about 0.8 mile from the S end of Outer Harbor. In 1973, the midchannel controlling depth was 20 feet.

(130) Buffalo Inner Harbor comprises Buffalo River and Buffalo Ship Canal. The dredged section of **Buffalo River** extends SE and then generally E for about 5.8 miles from the N end of Outer Harbor to the ConRail railroad bridge. Federal project depth is 22 feet. However, the river is subject to extensive shoaling. The entrance to the river is marked by lights and buoys. (See Notice to Mariners and latest edition of charts for controlling depths.) Above the ConRail bridge, depths are 5 to 15 feet to the mouth of **Cazenovia Creek** and thence 1 to 6 feet to the Bailey

Avenue Bridge. Submerged rocks immediately above Bailey Avenue Bridge render navigation for even small craft very hazardous.



# Corrected through NM Feb. 21/04 Corrected through LNM Dec. 16/03

## RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

#### CAUTION

## BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

#### RACING BUOYS

Racing buops within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

#### POLITION REPORTS

Report all spills of oil and hazardous sub-stances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

#### CAUTION

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

Official registron. Official positions are shown thus:

(Accurate location) o(Approximate location)

#### CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

#### CAUTION

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

## CAUTION

## SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

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Additional uncharted submarine pipelines and submarine cobles may exist within the area of this chart. Not all submarine pipelines and submarine cobles are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme coution when operating vessels in depths of water comparable to their draft in acreas where pipelines and cobles may exist, and when anchoring, dragging or traviling.

## CAUTION

Temporary changes or defects in aids to

Temporary changes or detects in aids to navigation are not indicated on this charf. See Local Notice to Mariners. During some winter months or when endan-gered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

## CAUTION

Cables for an Ice Boom are permanently attached to anchors on the lake bottom. They are submerged and not buried. Floating steel pontoons are attached to these cables between December 15 and April 1.

## NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts.
The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Buffalo, New York KEB-98 162.55 MHz (Chan. WX-1)

## **Table of Selected Chart Notes**

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at he Office of the District Engineer, Corps of Engineers in

Refer to charted regulation section numbers.

#### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane reference for the charted depths, If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

## WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

#### NOTE B

The channel legend reflects the Corps of Engineers project depth. The Corps of Engineers publishes the controlling depth periodically in the U.S. Coast Guard Local Notice to Mariners. For further information on channel depths, direct inquiries to Office of the District Engineer, Corps of Engineers, Buffalo, New York.

#### CAUTION

## POTABLE WATER INTAKE (PWI)

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

## SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot</u>. 

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

## CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corp of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) ...... Referred to mean water level at Rimouski, Quebec International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure

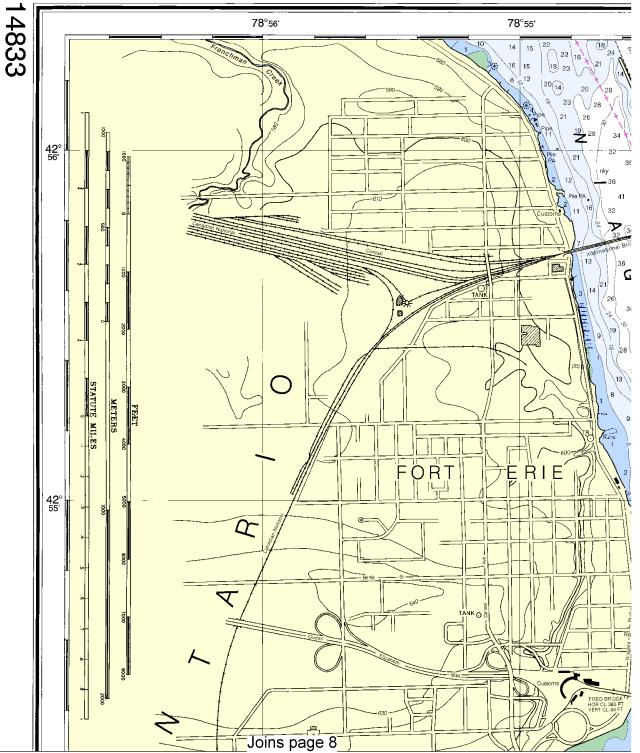
## PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGraftx, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-80-0584-4888, http://NoteanGraftx.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com

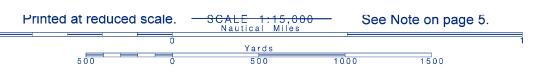
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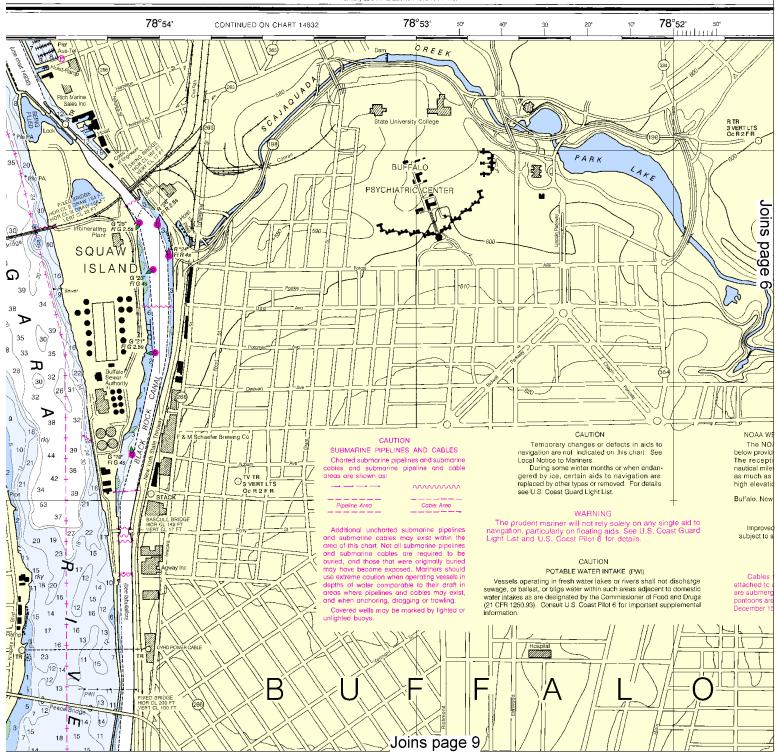
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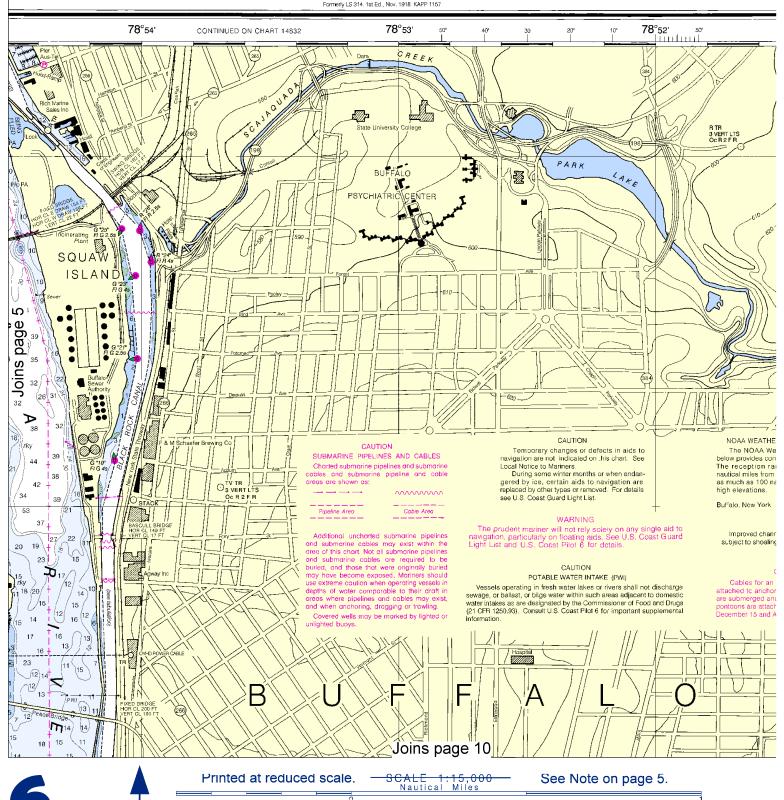
Formerly LS 314, 1st Ed., Nov. 1918 KAPP 1157



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:20000. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

by NOAA for Notices to Mariners nt-or-Demand technology. New DAA charts. Ask your chart agent 883, http://NauticalCharts.gov, T, http://OceanGrafix.com, or

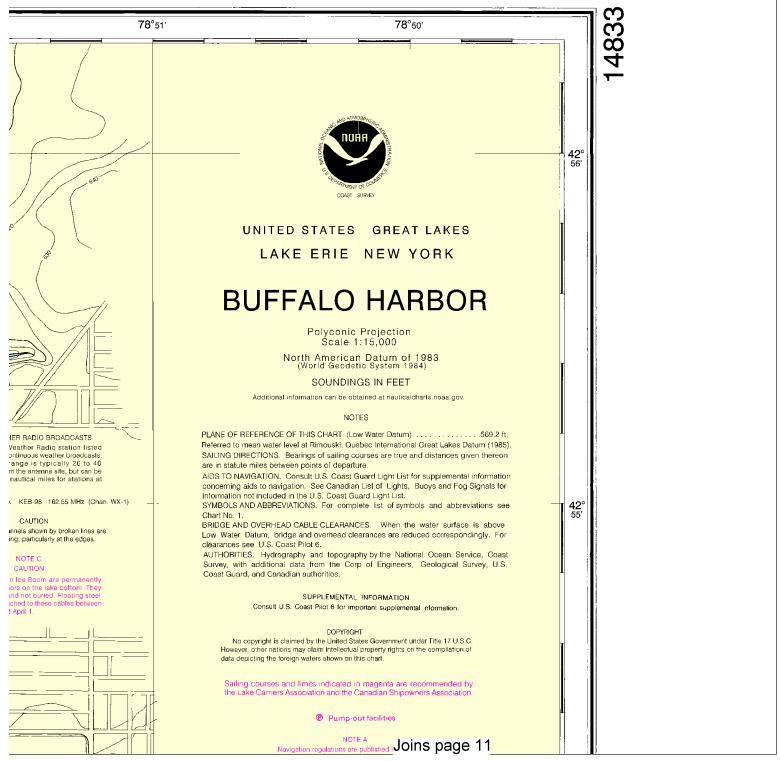
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# **SOUNDINGS IN FEET**

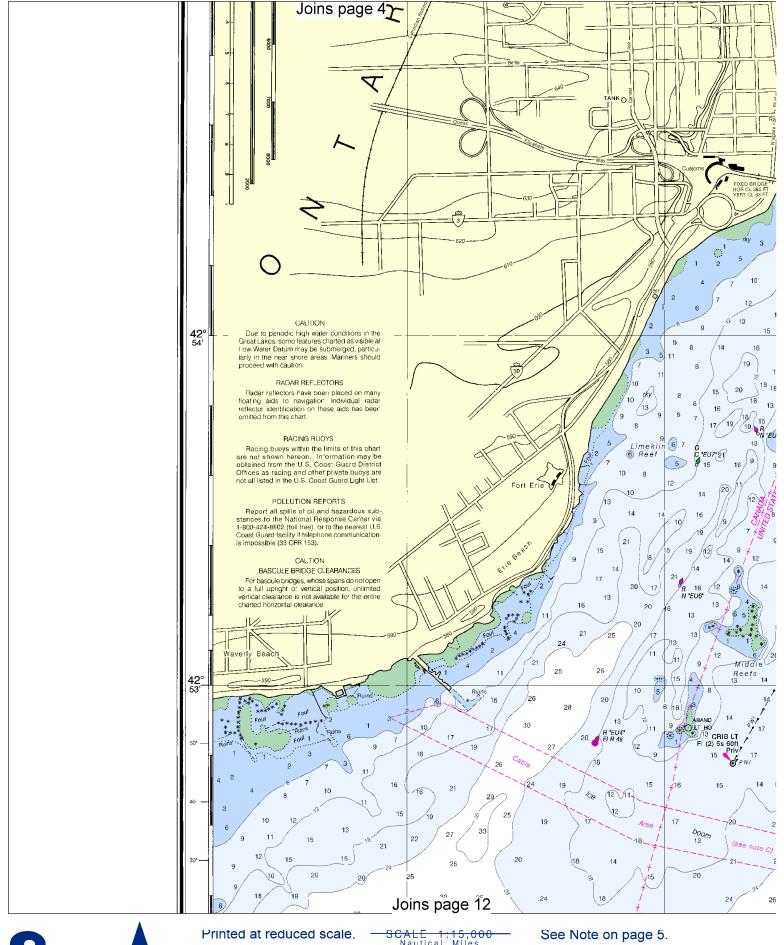


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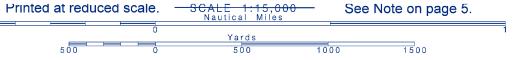
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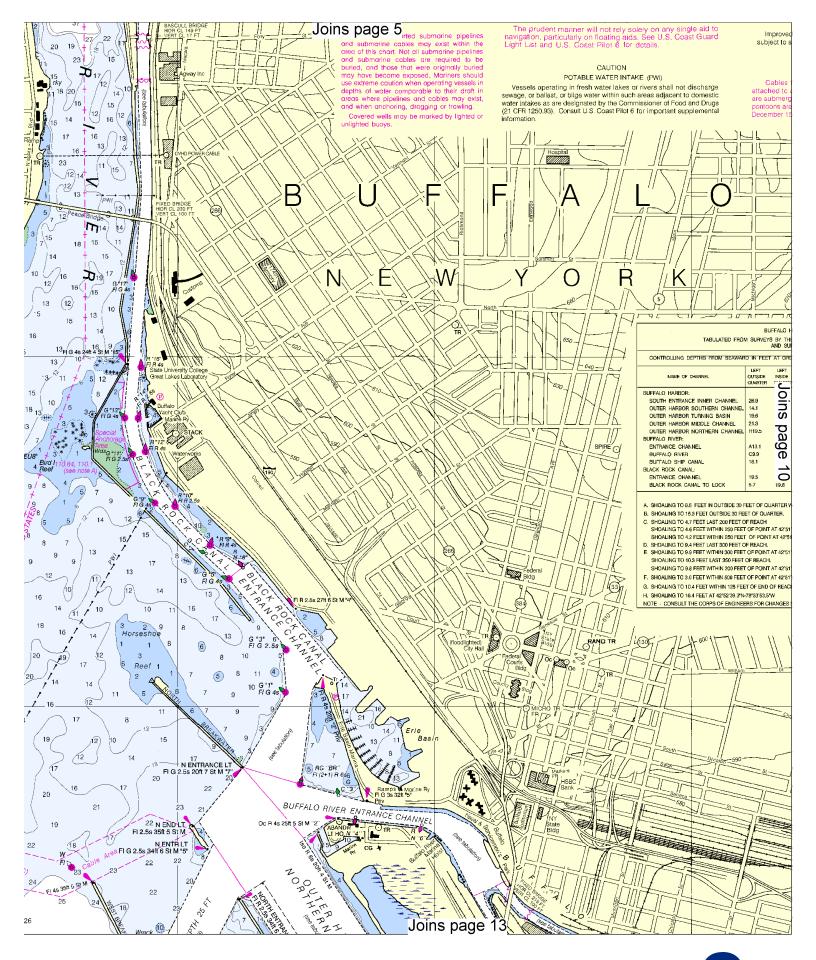
Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.

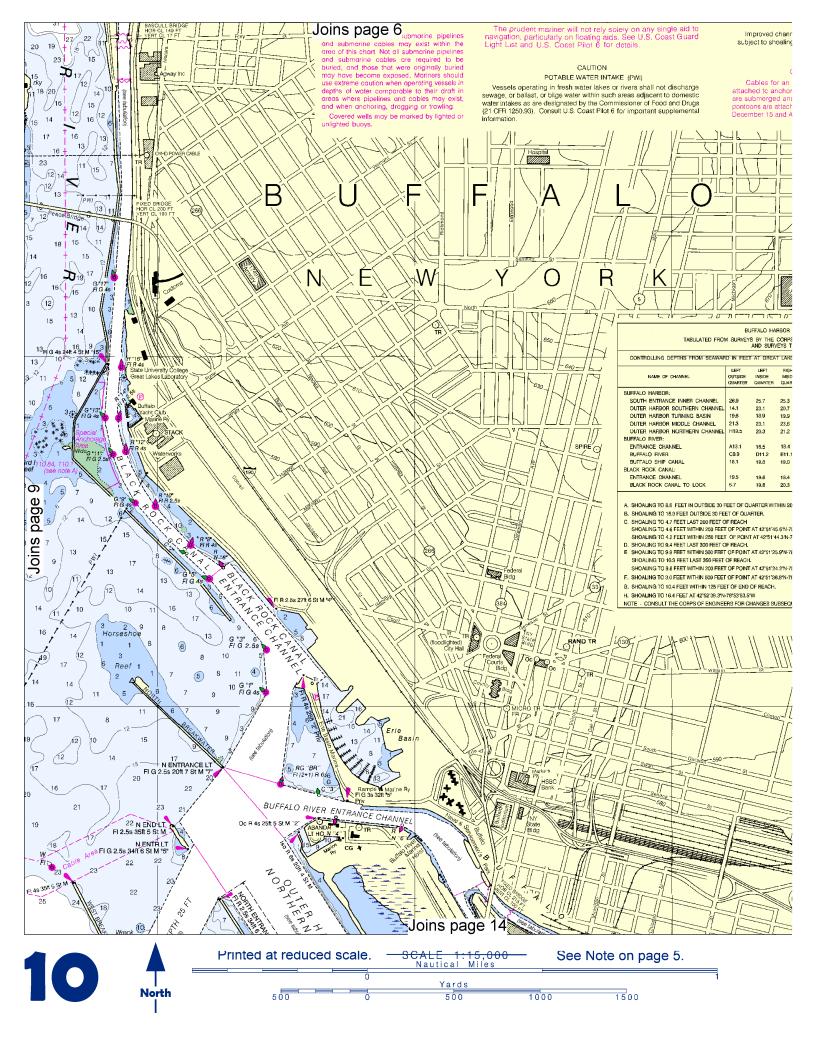
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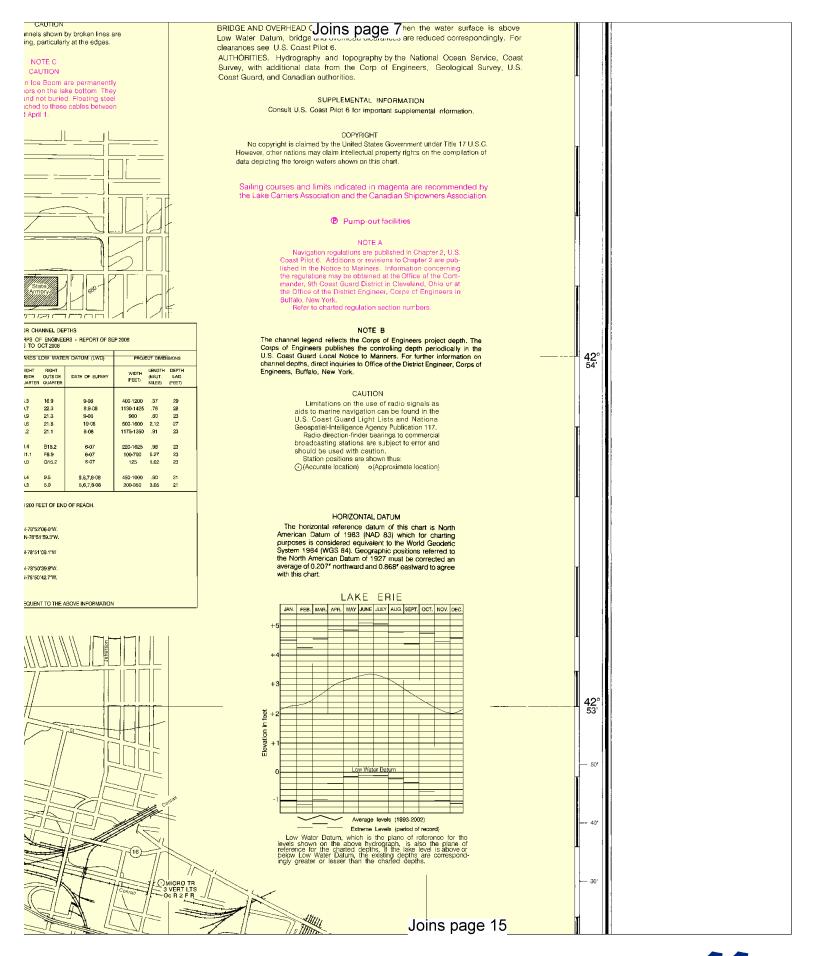


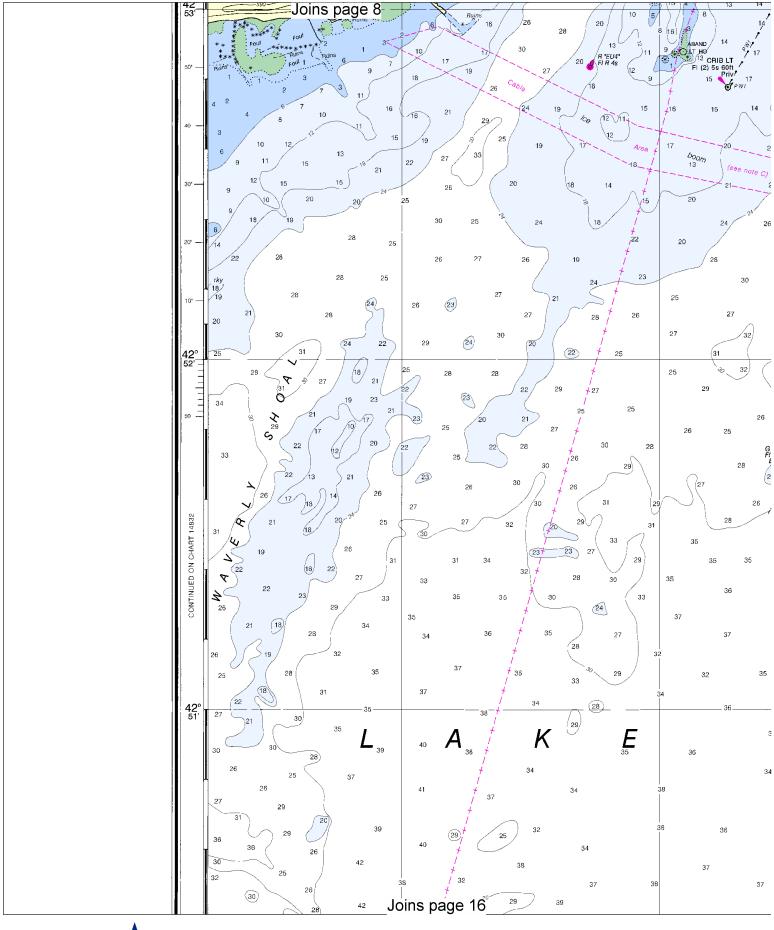






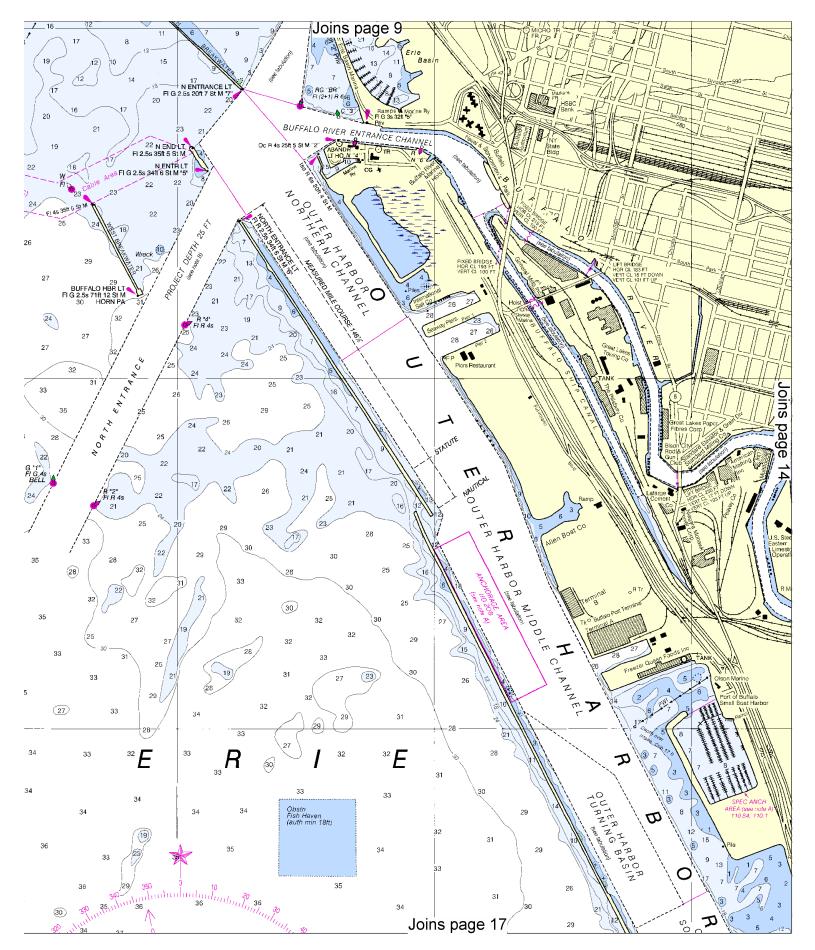


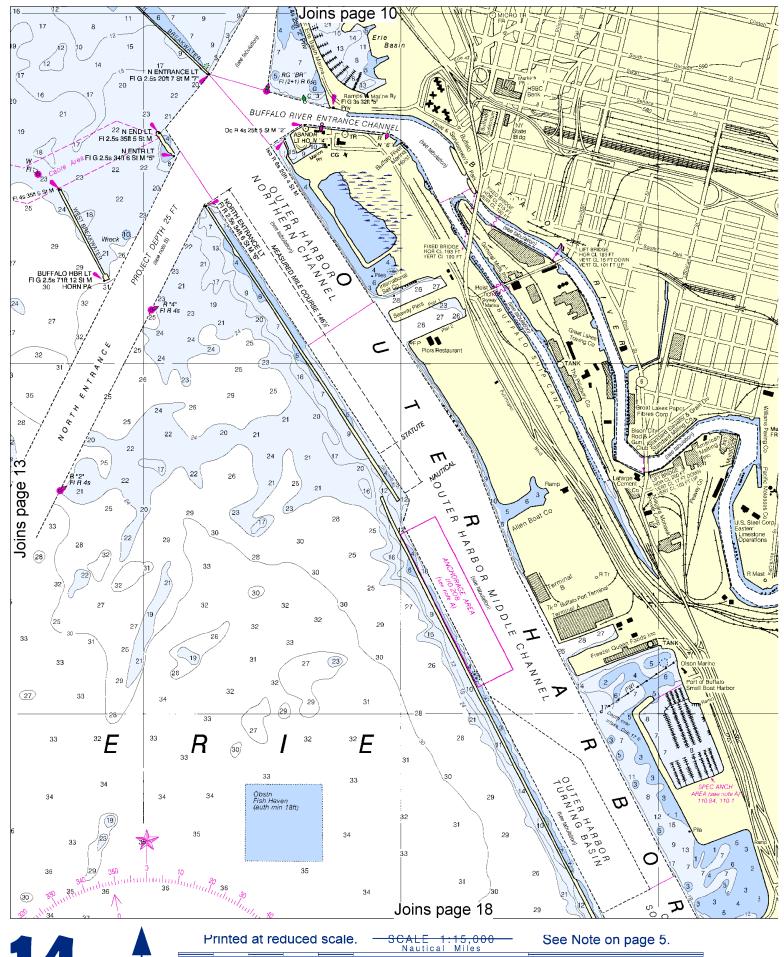




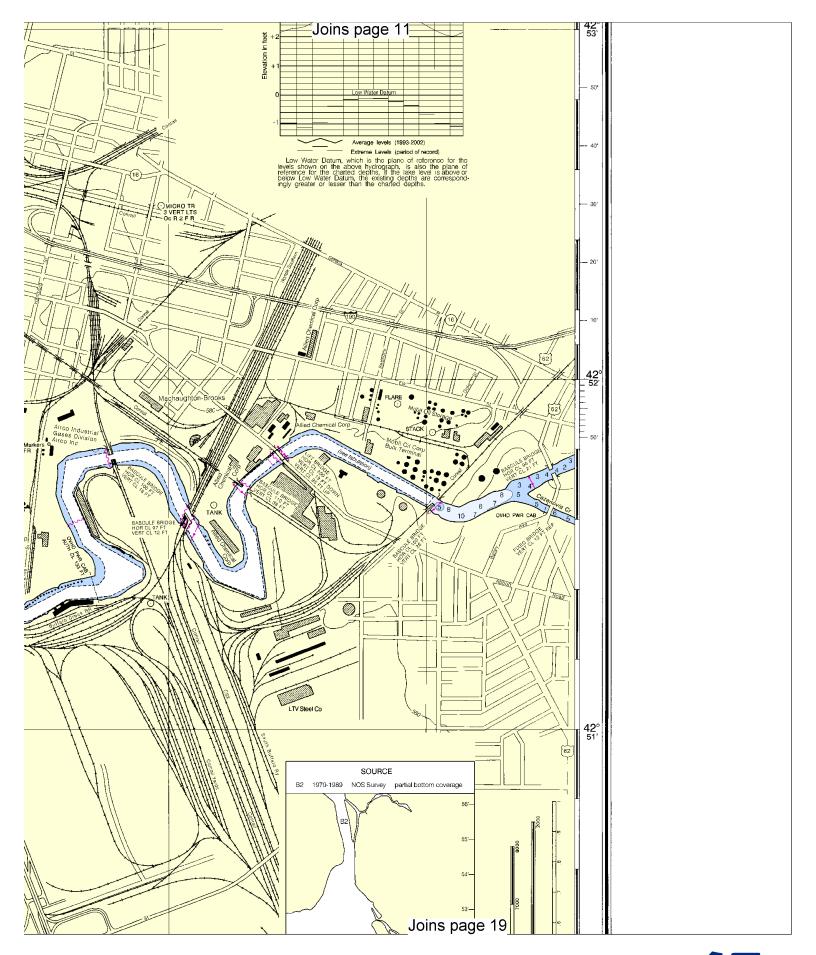


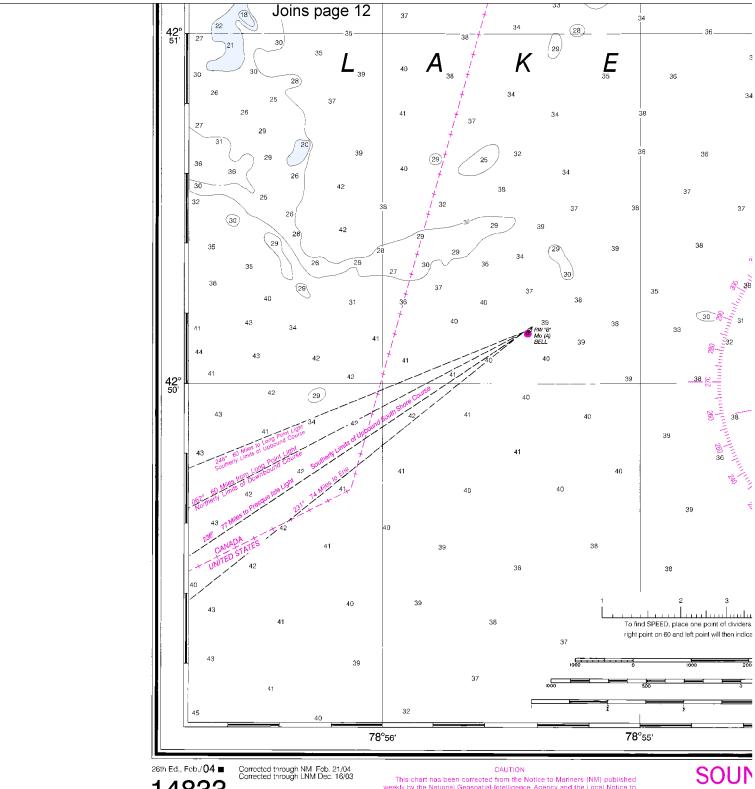






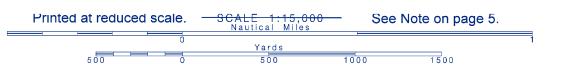


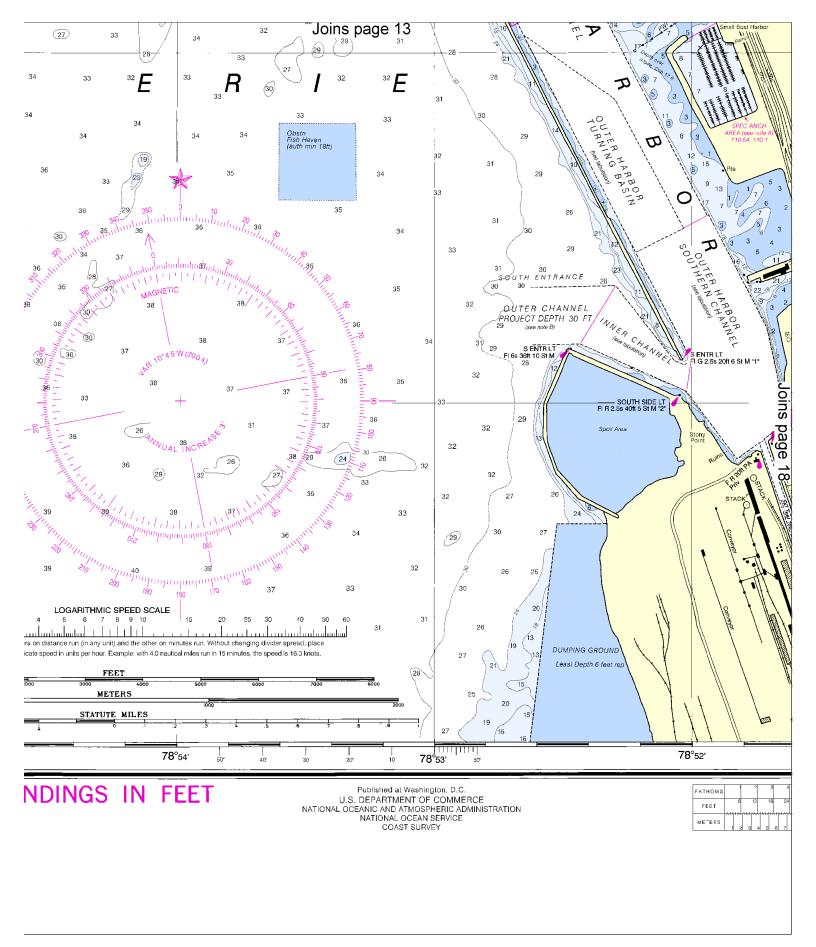


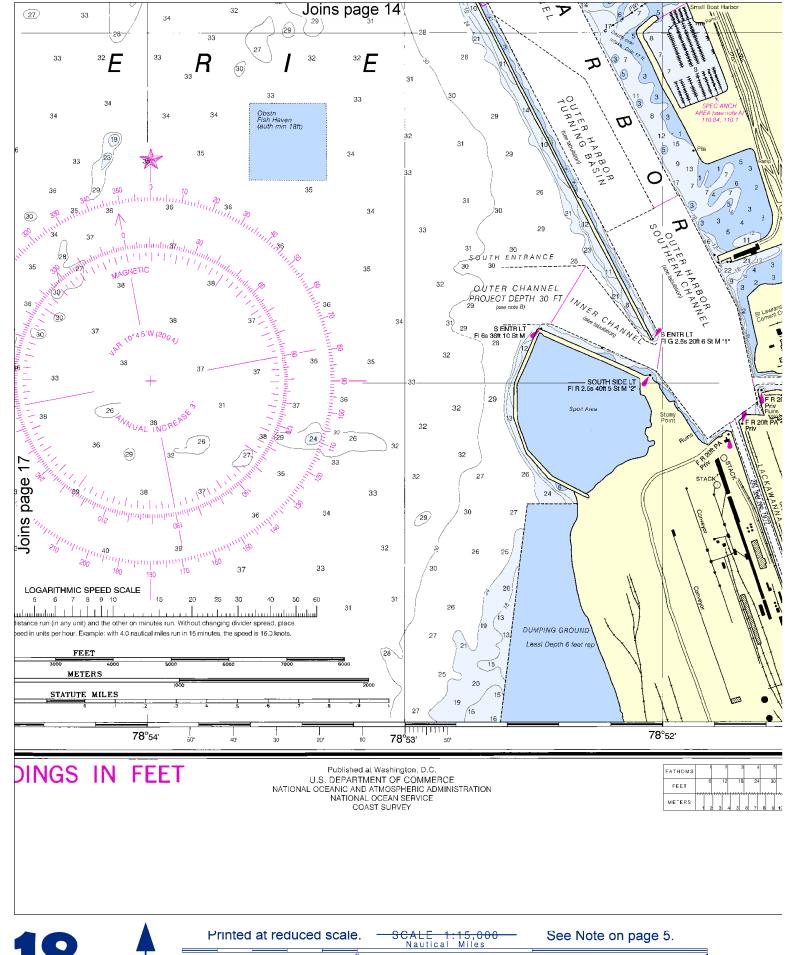


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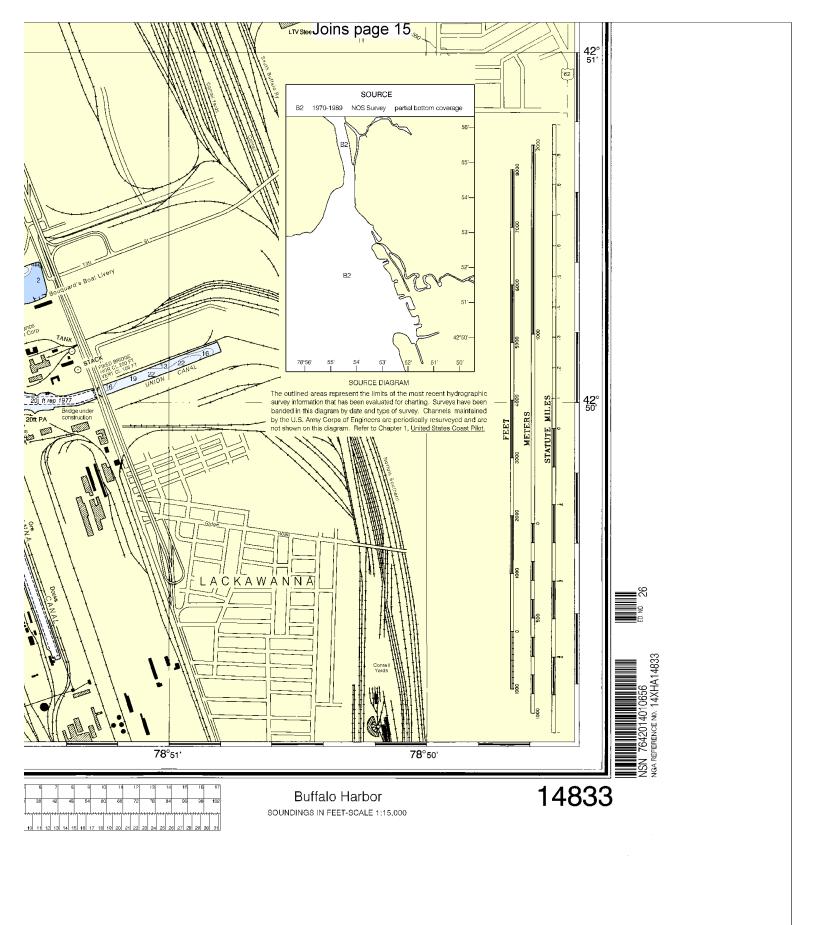












## **EMERGENCY INFORMATION**

## VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

## Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

## **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

## HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

**Coast Guard Search & Rescue (RCC)** – 216-902-6117

Coast Guard Search & Rescue (Buffalo) – 716-843-9527

**Canadian Coast Guard (RCC Trenton)** – 1-800-267-7270 or 613-965-3870

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



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Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at <a href="https://www.oceanGrafix.com">www.oceanGrafix.com</a>.

## Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

## Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="